Abstract

The invention relates to a method for inspecting quality criteria of flat textile structures embodied in a multi-layer form according to a contour, in particular woven, stitched, knitted, sewn or non-woven finished structures, preferably provided with cut areas or holes, separated or forming a material web, in particular when said structures are used for producing airbags. The inventive method is carried out using image-forming inspection means, in particular optical inspection means, preferably a linear array camera or CCD array camera, whereby a relative motion is produced between the structures to be inspected and the camera, and the structure is arranged at least by area at a defined distance from the image-forming inspection means, preferably on the substantially flat surface of a control table or inspection line.

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15 The texture of the structure is analyzed according to a segmentation method. Characteristics such as center of gravity, area, main axes, etc. are calculated for individual coherent segments of the same texture, on the basis of which a distinctive system of coordinates for the structure and corresponding structures of the same type is defined which is invariant with respect to the 20 torsion, reflection, stretch/compression and the deformation of the structure and allows measuring points to be defined. In the determining of said system of coordinates, in addition to said segment characteristics, the position and the direction of identification threads having been intentionally introduced into the structure can also be taken into account. The dimensional accuracy 25 of the respective distances is controlled and a quality report is produced on the basis of the measuring points recorded by the system based on the quality requirements of a manufacturer or consumer, preferably in critical distance and marginal areas.